

## CLAIMS

Therefore, having thus described the invention, at least the following is claimed:

- 1        1. A media content recording system in a subscriber television system, comprising:  
2              a memory for storing logic;  
3              a buffer space for buffering a plurality of media content instances; and  
4              a processor configured with the logic to designate as permanent only a media  
5              content instance among the plurality of media content instances in the  
6              buffer space that is requested by a user for permanent recording.  
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- 1        2. The system of claim 1, wherein the processor is further configured with the logic  
2              to provide a user interface, responsive to input from the user, that segregates the media  
3              content instances of the buffer space into separately identifiable media content instances  
4              and enables the user to select and permanently record at least one of the media content  
5              instances.
- 1        3. The system of claim 2, wherein the processor is further configured with the logic  
2              to enable the user to permanently record a displayed media content instance of the buffer  
3              space by selecting a button on an input device during any buffered and displayed frame of  
4              the media content instance to be permanently recorded.
- 1        4. The system of claim 2, wherein the processor is further configured with the logic  
2              to provide the buffered media content instances as entries in a displayed pre-configured  
3              list that enables the user to select which entry to be permanently recorded.
- 1        5. The system of claim 1, wherein the processor is further configured with the logic  
2              to maintain a management file for each of the buffered media content instances, wherein  
3              the processor is further configured with the logic to maintain a status flag in the  
4              management file wherein the status flag is configured as temporary for a buffered media  
5              content instance that is not designated for permanent recording.
- 1        6. The system of claim 5, wherein the processor is further configured with the logic  
2              to configure the status flag of the management file for a buffered media content instance

3 as permanent when the user requests that said media content instance be permanently  
4 recorded, wherein the processor is further configured with the logic to cause the  
5 permanently recorded media content instance to have a permanent designation in a file  
6 allocation table in response to having the status flag of the corresponding management  
7 file configured as permanent, such that the buffer space storing the permanently recorded  
8 media content instance becomes designated as non-buffer space.

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1 7. The system of claim 1, wherein the processor is further configured with the logic  
2 to use media content instance guide data to determine the start time and stop time of a  
3 media content instance buffered into the buffer space.

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1 8. The system of claim 1, wherein the processor is further configured with the logic  
2 to determine the receipt time into the buffer space by using the time indicated by an  
3 internal clock.

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1 9. The system of claim 1, wherein the processor is further configured with the logic  
2 to configure the media content instances as media content instance files.

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1 10. The system of claim 9, wherein the processor is further configured with the logic  
2 to randomly generate file names for the media content instance files.

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1 11. The system of claim 9, wherein the processor is further configured with the logic  
2 to use titles of the media content instances from media content instance guide data as  
3 media content instance file names.

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1 12. The system of claim 11, wherein the media content instance file names include  
2 channel number, the media content instance title, and the source of the media content  
3 instance.

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1 13. The system of claim 1, wherein the processor is further configured with the logic  
2 to cause the buffer space of the permanently recorded media content instance to be  
3 designated as non-buffer space.

1       14. The system of claim 1, wherein the processor is further configured with the logic  
2       to buffer analog broadcast media content instances, received at a communications  
3       interface, as digitally compressed media content instances.

1       15. The system of claim 1, wherein the processor is further configured with the logic  
2       to buffer an analog signal received at a connector from a consumer electronics device, as  
3       a digitally compressed media content instance.

1       16. The system of claim 1, wherein the processor is further configured with the logic  
2       to buffer digital broadcast media content instances, received at a communications  
3       interface, as digitally compressed media content instances.

1       17. The system of claim 1, wherein the processor is further configured with the logic  
2       to buffer digital media-on-demand media content instances, received at a communications  
3       interface from a remote server, as digitally compressed media content instances.

1       18. The system of claim 1, wherein the processor is further configured with the logic  
2       to buffer digital media content instances, received at a digital communications port from a  
3       local network, as digitally compressed media content instances.

1       19. The system of claim 1, wherein the processor is further configured with the logic  
2       to buffer digital media content instances, received at a digital communications port from a  
3       local device, as digitally compressed media content instances.

1       20. The system of claim 1, wherein the processor is further configured with the logic  
2       to delete the permanently designated media content instance as requested by the user.

1       21. A media content recording system in a subscriber television system, comprising:  
2            a memory for storing logic;  
3            a buffer space for buffering a plurality of media content instances; and  
4            a processor configured with the logic to provide a user interface, responsive to  
5            input from the user, that segregates the media content instances of the  
6            buffer space into separately identifiable media content instances and  
7            enables the user to select and permanently record at least one of the media

8           content instances, wherein the processor is further configured with the  
9           logic to enable the user to permanently record a displayed media content  
10          instance of the buffer space by selecting a button on an input device during  
11          any buffered and displayed frame of the media content instance to be  
12          permanently recorded, wherein the processor is further configured with the  
13          logic to select one of the media content instances at any point within a  
14          buffered start and end time of the media content instance for permanent  
15          recording, wherein the processor is further configured with the logic to  
16          maintain a management file for each of the buffered media content  
17          instances, wherein the processor is further configured with the logic to  
18          maintain a status flag in the management file wherein the status flag is  
19          configured as temporary for a buffered media content instance that is not  
20          designated for permanent recording, wherein the processor is further  
21          configured with the logic to configure the status flag of the management  
22          file for a buffered media content instance as permanent when the user  
23          requests that said media content instance be permanently recorded,  
24          wherein the processor is further configured with the logic to cause the  
25          permanently recorded media content instance to have a permanent  
26          designation in a file allocation table in response to having the status flag of  
27          the corresponding management file configured as permanent, such that the  
28          buffer space storing the permanently recorded media content instance  
29          becomes designated as non-buffer space, wherein the processor is further  
30          configured with the logic to use media content instance guide data to  
31          determine the start time and stop time of a media content instance buffered  
32          into the buffer space, wherein the processor is further configured with the  
33          logic to determine the receipt time into the buffer space by using the time  
34          indicated by an internal clock, wherein the processor is further configured  
35          with the logic to configure the media content instances as media content  
36          instance files, wherein the processor is further configured with the logic to  
37          use titles of the media content instances from media content instance guide  
38          data as media content instance file names, wherein the media content  
39          instance file names include channel number, the media content instance  
40          title, and the source of the media content instance, wherein the processor is  
41          further configured with the logic to cause the buffer space of the

42 permanently recorded media content instance to be designated as non-  
43 buffer space, wherein the processor is further configured with the logic to  
44 buffer analog broadcast media content instances, received at a  
45 communications interface, as digitally compressed media content  
46 instances, wherein the processor is further configured with the logic to  
47 buffer an analog signal received at a connector from a consumer  
48 electronics device, as a digitally compressed media content instance,  
49 wherein the processor is further configured with the logic to buffer digital  
50 broadcast media content instances, received at a communications interface,  
51 as digitally compressed media content instances, wherein the processor is  
52 further configured with the logic to buffer digital media-on-demand media  
53 content instances, received at a communications interface from a remote  
54 server, as digitally compressed media content instances, wherein the  
55 processor is further configured with the logic to buffer digital media  
56 content instances, received at a digital communications port from a local  
57 network, as digitally compressed media content instances, wherein the  
58 processor is further configured with the logic to buffer digital media  
59 content instances, received at a digital communications port from a local  
60 device, as digitally compressed media content instances, wherein the  
61 processor is further configured with the logic to designate as permanent  
62 only the selected media content instance among the plurality of media  
63 content instances in the buffer space that is requested by the user for  
64 permanent recording, wherein the processor is further configured with the  
65 logic to delete the permanently designated media content instance as  
66 requested by the user.

1       22. A media content recording method in a subscriber television system, comprising the  
2 steps of:

3             buffering a plurality of media content instances into a buffer space; and  
4             designating as permanent only a media content instance among the plurality of  
5             media content instances in the buffer space that is requested by a user for  
6             permanent recording.

1       23. The method of claim 22, further comprising the steps of providing a user  
2 interface, responsive to input from the user, segregating the media content instances of  
3 the buffer space into separately identifiable displayed media content instances, and  
4 enabling the user to select and permanently record at least one of the media content  
5 instances.

1       24. The method of claim 23, further comprising the step of enabling the user to  
2 permanently record a displayed media content instance of the buffer space by enabling  
3 the user to select a button on an input device during any buffered and displayed frame of  
4 the media content instance to be permanently recorded.

1       25. The method of claim 23, further comprising the step of providing the buffered  
2 media content instances as entries in a displayed pre-configured list that enables the user  
3 to select which entry to be permanently recorded.

1       26. The method of claim 22, further comprising the steps of maintaining a  
2 management file for each of the buffered media content instances, and maintaining a  
3 status flag in the management file, and configuring the status flag as temporary for a  
4 buffered media content instance that is not designated for permanent recording.

1       27. The method of claim 26, further comprising the steps of configuring the status flag  
2 of the management file for a buffered media content instance as permanent when the user  
3 requests that said media content instance be permanently recorded, causing the  
4 permanently recorded media content instance to have a permanent designation in a file  
5 allocation table in response to having the status flag of the corresponding management

6 file configured as permanent, such that the buffer space storing the permanently recorded  
7 media content instance becomes designated as non-buffer space.

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2 28. The method of claim 22, further comprising the step of using media content  
3 instance guide data to determine the start time and stop time of a media content instance  
buffered into the buffer space.

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2 29. The method of claim 22, further comprising the step of determining the receipt  
time into the buffer space by using the time indicated by an internal clock.

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2 30. The method of claim 22, further comprising the step of configuring the media  
content instances as media content instance files.

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2 31. The method of claim 30, further comprising the step of randomly generating file  
names for the media content instance files.

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2 32. The method of claim 30, further comprising the step of using titles of the media  
content instances from media content instance guide data as media content instance file  
names.

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2 33. The method of claim 32, wherein the media content instance file names include  
3 channel number, the media content instance title, and the source of the media content  
instance.

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2 34. The method of claim 22, further comprising the step of causing the buffer space of  
the permanently recorded media content instance to be designated as non-buffer space.

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2 35. The method of claim 22, further comprising the step of buffering analog broadcast  
3 media content instances, received at a communications interface, as digitally compressed  
media content instances.

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2 36. The method of claim 22, further comprising the step of buffering an analog signal  
3 received at a connector from a consumer electronics device, as a digitally compressed  
media content instance.

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1     37. The method of claim 22, further comprising the step of buffering digital broadcast  
2 media content instances, received at a communications interface, as digitally compressed  
3 media content instances.

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1     38. The method of claim 22, further comprising the step of buffering digital media-  
2 on-demand media content instances, received at a communications interface from a  
3 remote server, as digitally compressed media content instances.

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1     39. The method of claim 22, further comprising the step of buffering digital media  
2 content instances, received at a digital communications port from a local network, as  
3 digitally compressed media content instances.

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1     40. The method of claim 22, further comprising the step of buffering digital media  
2 content instances, received at a digital communications port from a local device, as  
3 digitally compressed media content instances.

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1     41. The method of claim 22, further comprising the step of deleting the permanently  
2 designated media content instance as requested by the user.

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1     42. A media content recording method in a subscriber television system, comprising the  
2 steps of:

3                 buffering a plurality of media content instances;  
4                 providing a user interface, responsive to input from the user, that segregates the  
5                 media content instances of the buffer space into separately identifiable  
6                 media content instances and enables the user to select and permanently  
7                 record at least one of the media content instances;  
8                 enabling the user to permanently record a displayed media content instance of the  
9                 buffer space by selecting a button on an input device during any buffered  
10                 and displayed frame of the media content instance to be permanently  
11                 recorded;  
12                 selecting one of the media content instances at any point within a buffered start  
13                 and end time of the media content instance for permanent recording;  
14                 maintaining a management file for each of the buffered media content instances;

15            maintaining a status flag in the management file wherein the status flag is  
16            configured as temporary for a buffered media content instance that is not  
17            designated for permanent recording;  
18            configuring the status flag of the management file for a buffered media content  
19            instance as permanent when the user requests that said media content  
20            instance be permanently recorded;  
21            causing the permanently recorded media content instance to have a permanent  
22            designation in a file allocation table in response to having the status flag of  
23            the corresponding management file configured as permanent, such that the  
24            buffer space storing the permanently recorded media content instance  
25            becomes designated as non-buffer space;  
26            using media content instance guide data to determine the start time and stop time  
27            of a media content instance buffered into the buffer space;  
28            determining the receipt time into the buffer space by using the time indicated by  
29            an internal clock;  
30            configuring the media content instances as media content instance files;  
31            using titles of the media content instances from media content instance guide data  
32            as media content instance file names, wherein the media content instance  
33            file names include channel number, the media content instance title, and  
34            the source of the media content instance;  
35            causing the buffer space of the permanently recorded media content instance to be  
36            designated as non-buffer space;  
37            buffering analog broadcast media content instances, received at a communications  
38            interface, as digitally compressed media content instances;  
39            buffering an analog signal received at a connector from a consumer electronics  
40            device, as a digitally compressed media content instance;  
41            buffering digital broadcast media content instances, received at a communications  
42            interface, as digitally compressed media content instances;  
43            buffering digital media-on-demand media content instances, received at a  
44            communications interface from a remote server, as digitally compressed  
45            media content instances;  
46            buffering digital media content instances, received at a digital communications  
47            port from a local network, as digitally compressed media content  
48            instances;

49 buffering digital media content instances, received at a digital communications  
50 port from a local device, as digitally compressed media content instances;  
51 designating as permanent only the selected media content instance among the  
52 plurality of media content instances in the buffer space that is requested  
53 by the user for permanent recording; and  
54 deleting the permanently designated media content instance as requested by the  
55 user.

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